



US005878206A

United States Patent [19]
Chen et al.

[11] **Patent Number:** **5,878,206**
 [45] **Date of Patent:** **Mar. 2, 1999**

[54] **COMMIT SCOPE CONTROL IN
 HIERARCHICAL INFORMATION
 PROCESSES**

[75] Inventors: **Qiming Chen**, Sunnyvale; **Umeshwar
 Dayal**, Saratoga, both of Calif.

[73] Assignee: **Hewlett-Packard Company**, Palo Alto,
 Calif.

[21] Appl. No.: **823,704**

[22] Filed: **Mar. 25, 1997**

[51] Int. Cl.⁶ **G06F 11/14; G06F 17/30**

[52] U.S. Cl. **395/182.17; 707/10; 707/202;
 707/203**

[58] Field of Search **395/182.13, 182.14,
 395/182.17, 182.18; 707/201, 202, 203,
 10**

[56] **References Cited**

U.S. PATENT DOCUMENTS

5,287,501	2/1994	Lomet	707/202
5,432,926	7/1995	Citron et al.	395/182.02
5,506,983	4/1996	Atkinson et al.	707/1

Primary Examiner—Ayaz R. Sheikh

Assistant Examiner—Sumati Lefkowitz

[57] **ABSTRACT**

An information system that enables a child transaction to broaden the visibility of its data updates to a wider scope than the scope of its parent transaction thereby enhancing concurrency but without sacrificing protection in that scope. The information system provides scoped transactions and provides failure handling in hierarchical information processes that contain scoped transactions.

18 Claims, 7 Drawing Sheets

